

Appl. No. 10/660,503
Amendment in response to
Office Action mailed 12/02/2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A safety device for protecting a worker from accidental energization or potential rise due to ground fault events of a distribution cable, comprising a main insulated gap formed between two conductors, one conductor being adapted for electrical connection to ground and the second conductor being adapted for electrical connection to said distribution cable, a precision gap between said two conductors, and connected in parallel with said precision gap a surge arrester and a resistor in series, wherein said surge arrester has a voltage rating below the breakdown voltage of said precision gap whereby said surge arrester prevents said precision gap from flashing during a ground fault event up to said voltage rating, and, wherein said main insulated gap comprises the two opposed conductors electrically separated by said insulation extending into a region proximate to said precision gap, whereby when said precision gap flashes, insulation in said region is destroyed and a short circuit forms between said electrodes conductors.

Claim 2 (original): The safety device of claim 1 wherein said precision gap comprises a gap arrester.

Claim 3 (original): The safety device of claim 2 wherein said gap arrester comprises a gas discharge tube arrester.

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Claim 4 (original): The safety device of claim 2 wherein said gap arrester has a breakdown voltage between 100V and 10,000V.

Claim 5 (original): The safety device of claim 2 wherein said gap arrester has a breakdown voltage of approximately 3000V.

Claim 6 (original): The safety device of claim 1 wherein said surge arrester comprises an MOV arrester.

Claim 7 (canceled)

Claim 8 (currently amended): The safety device of claim 1 wherein said ~~main-gap conductors~~ comprises comprise two conductive bars secured together and insulated from each other.

Claim 9 (canceled)

Claim 10 (original): The safety device of claim 1 wherein said surge arrester has a voltage rating approximately 10% below that of the precision gap.

Claim 11 (original): The safety device of claim 1 wherein said resistor is a linear resistor.

Claim 12 (original): The safety device of claim 11 wherein said resistor has a resistance from 20 to 10,000 ohms.

Claim 13 (original): The safety device of claim 11 wherein said resistor has a

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resistance from 50 to 100 ohms.

Claim 14 (previously presented): The safety device of claim 1 wherein said precision gap comprises an intelligent control to trigger the breakdown of said precision gap.

Claim 15 (previously presented): The safety device of claim 1 wherein said insulation in said region proximate to said precision gap consists of an insulating film.